ECUTEL

Viatores Mobility

Solutions for Public Safety

▶ **Our Business**

  ▶ Ecutel is a leading provider of secure access solutions for mobile workers and those who support them

▶ **History**

  ▶ Founded in 1997, core technologies originated during consultancy with the DoD. Ecutel software is sold worldwide by leading technology integrators – Hewlett Packard, Siemens, and Matsushita

▶ **Management Team**
  ▶ Chairman: Jack McDonnell
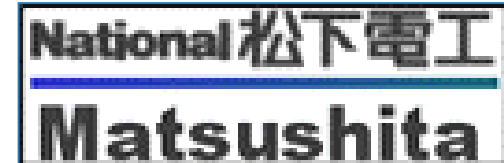 ▶ CEO: Tom Matthews
  ▶ CTO: Dzung Tran

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Business Partners

Global Solution Partners

Wireless Carrier Partners

Public Safety Partners

▶ **Security risks**

▶ **Multiple network protocols**

▶ **Complexity for end-users**

▸ Stop active applications

▸ Reconfigure the mobile device

▸ Establish required security (VPN)

▸ Control inactive network connections

▸ Restart applications

▸ Reboot the device

Data users have portability, <u>NOT</u> mobility

Gartner

"You should treat a wireless LAN like an untrusted network outside of the firewall"

CNN.com

"Off-the-shelf hack breaks wireless encryption"

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City and County of
HONOLULU, HAWAII

POLICE

Profile

▸ Population: 892,000 (4 mil. visitors)

▸ 11th largest city (by pop.)

▸ 40th largest county

▸ Area: 600 sq. miles (Oahu)

Public Safety Vehicles

▸ 1,200 Police Cruisers

▸ 200 Additional for "First Responders"

- ▪ Emergency Services
- ▪ Fire
- ▪ Civil Defense
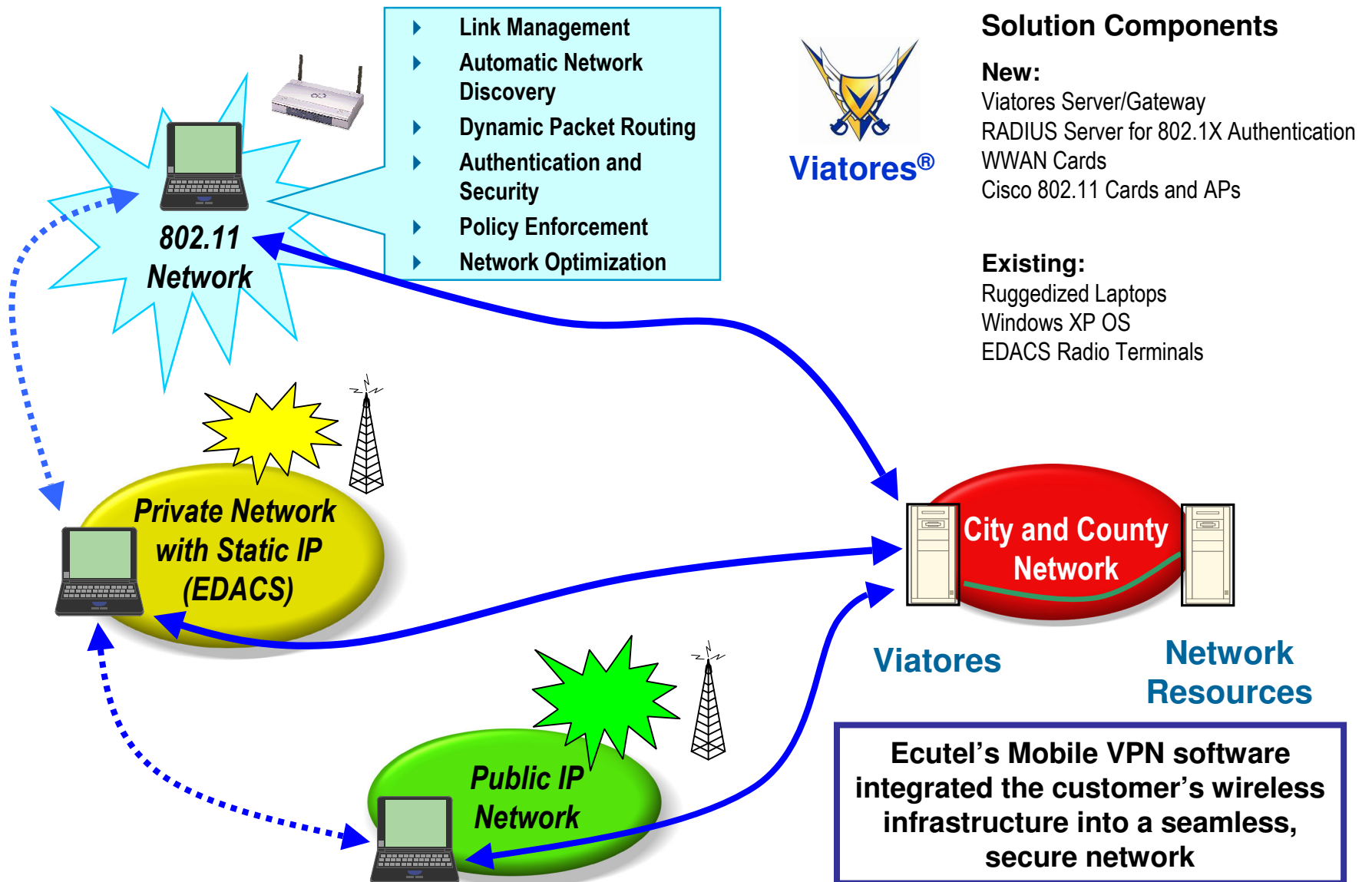
Existing Network (EDACS)

▸ Half duplex 800 MHz private radio system

▸ Not designed for higher bandwidth applications

▸ Nearing capacity limits

▸ Prohibitive maintenance/upgrade costs

Primary Applications
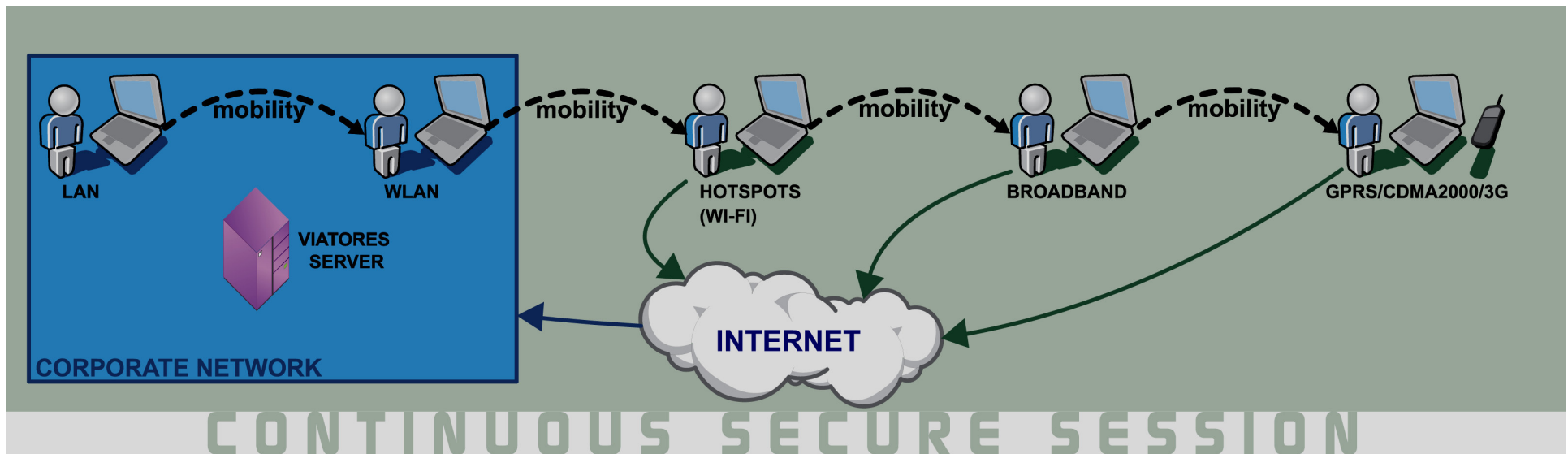
▸ PacketCluster® Patrol

▸ Email

▸ File sharing

▸ **EDACS network was not designed to handle "enterprise" applications and had reached its capacity limit**

▸ **Maintenance and upgrade costs for the the system were high in comparison to newer WLAN and WWAN technologies**

▸ **The customer needed a way to provide wireless access to higher-bandwidth applications at a reasonable cost**

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802.11 Network

- ▸ Link Management
- ▸ Automatic Network Discovery
- ▸ Dynamic Packet Routing
- ▸ Authentication and Security
- ▸ Policy Enforcement
- ▸ Network Optimization

Viatores®

Solution Components

New:
Viatores Server/Gateway
RADIUS Server for 802.1X Authentication
WWAN Cards
Cisco 802.11 Cards and APs

Existing:
Ruggedized Laptops
Windows XP OS
EDACS Radio Terminals

Private Network with Static IP (EDACS)

Public IP Network

City and County Network

Viatores

Network Resources

Ecutel's Mobile VPN software integrated the customer's wireless infrastructure into a seamless, secure network
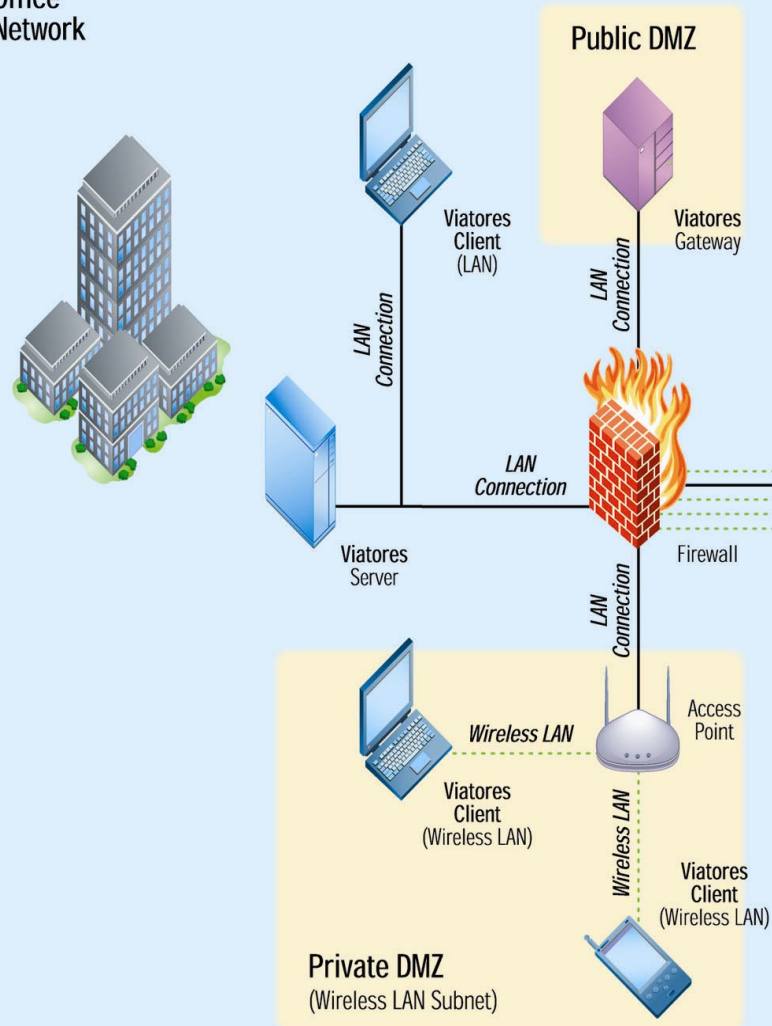
Mobile Management Features

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Ecutel offers mobile access to system and network management tools, and Command Authoring wizards for creating customized "point-and-click" functionality for IT Administrators.

Wired to Wireless^{SM}

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Viatores Specifications

- **Network Interoperability**
  - Private Networks: LAN (802.3), WLAN (802.11), VLAN (Layer 3) and Bluetooth, Private IP Radio Networks
  - Wireless Public Networks: Wi-Fi Zones (hot spots), GPRS, 1XRTT, EV-DO, CDMA, CDPD, NTT DoCoMo, GSM-Data, EDGE, UMTS and HSCSD
 - Wired Public Networks: POTS, DSL, Cable and ISDN
- **Standards and RFC's**
  - Mobile IP: 2002-2005, 2344, 2006
  - IPSec: 2401-2410
  - PKI, RSA, DSA, DES, 3DES, IKE, MD5, SHA, RADIUS, Microsoft Active Directory, RSA SecurID, SNMP, Smartcard, PKCS-7, PKCS-10, PKCS-12, SNMP, NAT/NAPT Traversal
- **Enterprise Platforms**
  - Client: Windows 98, ME, 2000, XP, Pocket PC
  - Server: Windows Server 2003, Windows 2000, Linux

▶ **Standards-based Architecture**

  ▸ Only solution based on trusted IETF standards

  ▸ Optimize your mobility without compromising security
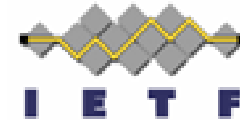
▶ **OS Independent Design**

  ▸ Portable to multiple operating systems

  ▸ Less vulnerable to exploitation of security weakness specific to any operating system

▶ **Support for Any Network Architecture**

  ▸ Interoperates with existing back-end network infrastructure

  ▸ Use with Active Directory, RADIUS, Novell, LDAP, RSA SecurID authentication

Network Administration

- Administrator can use Viatores Manager to control Viatores server and clients from workstation or desktop
- Remote Management of Viatores server from PDA, BlackBerry handheld, Smart Phone, or secure Web Client through IC² toolset
- Single-vendor solution

Network Switching by Policy

- Select by best available bandwidth or least cost
- Administrators may set priorities based on any factor relevant to the customer

Network Device Agnostic

- Does not require specific devices for optimized performance
- Other solutions may limit you to certain types of modems

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- ▶ **Security Exceeds Traditional VPN Standards**
  - ▶ Does not require opening firewall ports to the public
  - ▶ Viatores Gateway authenticates users outside the firewall before allowing users inside

- ▶ **Scalability**
  - ▶ Cryptographic hardware acceleration
  - ▶ Server clustering support
  - ▶ Support for primary and secondary authentication servers

- ▶ **Proven Technology**
  - ▶ Fortune 100 Enterprise and Government customers with implementations ranging from 25 to several thousand users
  - ▶ Viatores is re-branded and sold worldwide by global resellers, HP Open Roaming, Siemens Mobilis, and Matsushita NetCocoon

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